

REMARKS

This is a full and timely response to the outstanding non-final Office Action mailed July 9, 2008. Upon entry of the amendments in this response, claims 15 – 27, 29, and 31 – 38 remain pending. In particular, Applicants amend claims 15, 20, 26, and 32. Reconsideration and allowance of the application and presently pending claims are respectfully requested.

I. Allowed Subject Matter

The Office Action indicates that claims 20 and 22 – 25 would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims. Applicants sincerely appreciate this indication of allowed subject matter.

II. Claim Objections

Additionally, the Office Action argues that claims 19 – 21, 26 – 27, 29, 31, and 35 are objected to because of various informalities. More specifically, the Office Action objects to claims 19 and 21 because one or more of the elements of these claims allegedly do not recite “any input signal” and how these components are connected to the previous circuit components. Applicants respectfully traverse this objection for at least the reason that there is no such requirement for patentability of the pending claims.

Similarly, the Office Action objects to claim 26 because the Office Action apparently has difficulty in determining corresponding structure for the recited “means” elements. Applicants respectfully traverses this objection for at least the reason that element 200 of FIG. 7 corresponds to a data integrity supervisor of the signal integrity supervisor 80. Consequently, the Office Action overly narrows and incorrectly construes the corresponding structure of the means elements in claim 26 to the components of FIG. 7. For at least this reason, Applicants respectfully traverse this rejection and submit that claims 19 – 21, 26 – 27, 29, and 31 are allowable.

III. **Rejections Under 35 U.S.C. §102**

A. **Claim 32 is Allowable Over *Seiichi***

The Office Action indicates that claim 32 stands rejected under 35 U.S.C. §102(b) as allegedly being anticipated by U.S. Patent Number JP356143739A ("*Seiichi*"). Applicants respectfully traverse this rejection on the grounds that *Seiichi* does not disclose, teach, or suggest all of the claimed elements. More specifically, claim 32 recites:

A transmission unit, comprising:
a signal integrity supervisor configured to generate a response to a digital data stream having an anomalous condition, the signal integrity supervisor further configured to forward the response to the following:
control logic configured to reset the transmission unit, and
a line driver within the transmission unit, wherein the response powers down the line driver.
(Emphasis added).

Applicants respectfully submit that claim 32, as amended, is allowable over the cited art for at least the reason that *Seiichi* fails to disclose, teach, or suggest a "transmission unit, comprising... a signal integrity supervisor configured to generate a response to a digital data stream having an anomalous condition, the signal integrity supervisor further configured to forward the response to the following... ***a line driver within the transmission unit, wherein the response powers down the line driver***" as recited in claim 32. The Office Action all but admits that *Seiichi* fails to disclose a "line driver" but argues "under the broadest reasonable interpretation, the 'transmitting circuit' 13 of Kawasugi [*Seiichi*l] can be a line driver because both the 'line driver' and the 'transmitting circuit' 13 are configured to transmit a received circuit" (OA page 12, line 16). Applicants disagree. More specifically, as illustrated in both Exhibit A and Exhibit B, a line driver is completely different than a "transmitting circuit." Applicants submit that arbitrarily concluding that a "transmitting circuit" is the same as a "line driver" because they "transmit a received circuit" is improper when the two components are, by definition, completely

different. For at least this reason, *Seiichi* fails to disclose all the elements of claim 32. For at least this reason, claim 32, as amended, is allowable.

B. Claim 26 is Allowable Over *Hatata*

The Office Action indicates that claim 26 stands rejected under 35 U.S.C. §102(b) as allegedly being anticipated by U.S. Patent Number 4,481,629 ("*Hatata*"). Applicants respectfully traverse this rejection on the grounds that *Hatata* does not disclose, teach, or suggest all of the claimed elements. More specifically, claim 26 recites:

A circuit, comprising:
means for monitoring a digital data stream, wherein the means for monitoring a digital data stream comprises a signal integrity supervisor; and
means for generating an output signal in response to an anomalous condition in the digital data stream, ***the output signal including a fault recovery response to reset at least one component when the anomalous condition is detected***, wherein the means for generating an output signal is responsive to a digital data stream having a number of consecutive data values of equal magnitude wherein the number of consecutive data values reaches a predetermined maximum value.

(Emphasis added).

Applicants respectfully submit that claim 26, as amended, is allowable over the cited art for at least the reason that *Hatata* fails to disclose, teach, or suggest a "circuit, comprising... means for generating an output signal in response to an anomalous condition in the digital data stream, ***the output signal including a fault recovery response to reset at least one component when the anomalous condition is detected***" as recited in claim 26, as amended. More specifically, *Hatata* discloses "an abnormal monitoring device (82) compris[ing] a memory circuit (3) for recording n consecutive signals ($n \geq 3$) such as three consecutive signals (for three samples) (1b) and a consistency detecting circuit (4) such as a comparator well known in the art for testing the consistency of the data signals for three samples stored in the memory circuit (3) and to output a "1" signal (4a) to indicate an abnormal state when the three samples are the same" (Column 2, line 9). However, this is different "an output signal in response to an

anomalous condition in the digital data stream, ***the output signal including a fault recovery response to reset at least one component when the anomalous condition is detected*** as recited in claim 26, as amended. For at least this reason, claim 26, as amended, is allowable.

IV. Rejections Under 35 U.S.C. §103

A. Claim 33 is Allowable Over *Seiichi* in view of *Buer*

The Office Action indicates that claim 33 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Japanese Patent Number JP356143739A ("*Seiichi*") in view of U.S. Patent Number 6,188,257 ("*Buer*"). Applicants respectfully traverse this rejection for at least the reason that *Seiichi* in view of *Buer* fails to disclose, teach, or suggest all of the elements of claim 33. More specifically, dependent claim 33 is believed to be allowable for at least the reason that this claim depends from allowable independent claim 32. *In re Fine, Minnesota Mining and Mfg.Co. v. Chemque, Inc.*, 303 F.3d 1294, 1299 (Fed. Cir. 2002).

B. Claim 34 is Allowable Over *Seiichi*

The Office Action indicates that claim 34 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Japanese Patent Number JP356143739A ("*Seiichi*"). Applicants respectfully traverse this rejection for at least the reason that *Seiichi* fails to disclose, teach, or suggest all of the elements of claim 34. More specifically, dependent claim 34 is believed to be allowable for at least the reason that this claim depends from allowable independent claim 32. *In re Fine, Minnesota Mining and Mfg.Co. v. Chemque, Inc.*, 303 F.3d 1294, 1299 (Fed. Cir. 2002).

C. Claim 15 is Allowable Over *Seiichi* in view of *Nakatani*

The Office Action indicates that claim 15 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Japanese Patent Number JP356143739A ("*Seiichi*") in view of U.S.

Patent No. 6,130,619 (“*Nakatani*”). Applicants respectfully traverse this rejection for at least the reason that *Seiichi* in view of *Nakatani* fails to disclose, teach, or suggest all of the elements of claim 15. More specifically, claim 15 recites:

A transmission signal integrity supervisor within an analog front end (AFE), wherein the transmission signal integrity supervisor is configured to detect anomalous conditions and protect the AFE, the transmission signal integrity supervisor comprising:

a clock detector configured to receive a clock signal input and generate a first output signal in response to an at least one clock signal input anomalous condition, wherein the clock detector is further configured to forward the first output signal to at least one of control logic and devices external to the AFE, the clock detector including ***a resistor-capacitor combination coupled to a current mirror, the resistor-capacitor combination configured such that the first output signal triggers in response to a clock signal input that falls below a minimum frequency;*** and

a data supervisor configured to receive a digital data stream and generate a second output signal in response to an at least one digital data stream anomalous condition, wherein the data supervisor is further configured to forward the second output signal to at least one of a line driver within the AFE and devices external to the AFE.

(Emphasis added).

Applicants respectfully submit that claim 15, as amended, is allowable for at least the reason that a modified version of allowable claim 20 has been incorporated into claim 15.

D. Claims 16, 19, 37, and 38 are Allowable Over *Seiichi* in view of *Nakatani*

The Office Action indicates that claims 15 – 16, 19, 37, and 38 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Japanese Patent Number JP356143739A (“*Seiichi*”) in view of U.S. Patent Number 6,130,619 (“*Nakatani*”). Applicants respectfully traverse this rejection for at least the reason that *Seiichi* in view of *Nakatani* fails to disclose, teach, or suggest all of the elements of claims 16, 19, 37, and 38. More specifically, dependent claims 16 and 19 are believed to be allowable for at least the reason that these claims depend from allowable independent claim 15. Dependent claims 37 and 38 are believed to be allowable for

at least the reason that they depend from allowable independent claim 32. *In re Fine, Minnesota Mining and Mfg.Co. v. Chemque, Inc.*, 303 F.3d 1294, 1299 (Fed. Cir. 2002).

E. Claim 17 is Allowable Over *Seiichi* in view of *Nakatani* further in view of *Cummiskey*

The Office Action indicates that claim 17 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Japanese Patent Number JP356143739A ("*Seiichi*") in view of U.S. Patent Number 6,130,619 ("*Nakatani*") further in view of U.S. Patent Number 4,353,128 ("*Cummiskey*"). Applicants respectfully traverse this rejection for at least the reason that *Seiichi* in view of *Nakatani* further in view of *Cummiskey* fails to disclose, teach, or suggest all of the elements of claim 17. More specifically, dependent claim 17 is believed to be allowable for at least the reason that this claim depends from allowable independent claim 15. *In re Fine, Minnesota Mining and Mfg.Co. v. Chemque, Inc.*, 303 F.3d 1294, 1299 (Fed. Cir. 2002).

F. Claim 18 is Allowable Over *Seiichi* in view of *Nakatani* further in view of *Kodra*

The Office Action indicates that claim 18 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Japanese Patent Number JP356143739A ("*Seiichi*") in view of U.S. Patent Number 6,130,619 ("*Nakatani*") further in view of U.S. Patent Number 6,226,663 ("*Kodra*"). Applicants respectfully traverse this rejection for at least the reason that *Seiichi* in view of *Nakatani* further in view of *Kodra* fails to disclose, teach, or suggest all of the elements of claim 18. More specifically, dependent claim 18 is believed to be allowable for at least the reason that this claim depends from allowable independent claim 15. *In re Fine, Minnesota Mining and Mfg.Co. v. Chemque, Inc.*, 303 F.3d 1294, 1299 (Fed. Cir. 2002).

G. Claim 21 is Allowable Over *Seiichi* in view of *Nakatani* further in view of *Kamoi*

The Office Action indicates that claim 21 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Japanese Patent Number JP356143739A ("*Seiichi*") in view of U.S. Patent Number 6,130,619 ("*Nakatani*") further in view of U.S. Patent Number 5,280,483 ("*Kamoi*"). Applicants respectfully traverse this rejection for at least the reason that *Seiichi* in view of *Nakatani* further in view of *Kamoi* fails to disclose, teach, or suggest all of the elements of claim 21. More specifically, dependent claim 21 is believed to be allowable for at least the reason that this claim depends from allowable independent claim 15. *In re Fine, Minnesota Mining and Mfg.Co. v. Chemque, Inc.*, 303 F.3d 1294, 1299 (Fed. Cir. 2002).

H. Claims 35 and 36 are Allowable Over *Seiichi* in view of *Nakatani* further in view of *Hollenbach*

The Office Action indicates that claims 35 and 36 stand rejected under §35 U.S.C. §103(a) as being unpatentable over Japanese Patent Number JP356143739A ("*Seiichi*") in view of U.S. Patent Number 6,130,619 ("*Nakatani*") further in view of U.S. Patent Number 6,396,877 ("*Hollenbach*"). Applicants respectfully traverse this rejection for at least the reason that *Seiichi* in view of *Nakatani* further in view of *Hollenbach* fails to disclose, teach, or suggest all of the elements of claims 35 and 36. More specifically, dependent claims 35 and 36 are believed to be allowable for at least the reason that these claims depend from allowable independent claim 32. *In re Fine, Minnesota Mining and Mfg.Co. v. Chemque, Inc.*, 303 F.3d 1294, 1299 (Fed. Cir. 2002).

I. Claim 27 is Allowable Over *Hatata* in view of *Bartelink*

The Office Action indicates that claim 27 stands rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Number 4,481,629 ("*Hatata*") in view of U.S. Patent Number 4,390,750 ("*Bartelink*"). Applicants respectfully traverse this rejection for at least the reason that *Hatata* in view of *Bartelink* fails to disclose, teach, or suggest all of the elements of

claim 27. More specifically, dependent claim 27 is believed to be allowable for at least the reason that this claim depends from allowable independent claim 26. *In re Fine, Minnesota Mining and Mfg.Co. v. Chemque, Inc.*, 303 F.3d 1294, 1299 (Fed. Cir. 2002).

J. Claim 29 is Allowable Over *Hatata* in view of *Nakatani*

The Office Action indicates that claim 29 stands rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Number 4,481,629 ("*Hatata*") in view of U.S. Patent Number 6,130,619 ("*Nakatani*"). Applicants respectfully traverse this rejection for at least the reason that *Hatata* in view of *Nakatani* fails to disclose, teach, or suggest all of the elements of claim 29. More specifically, dependent claim 29 is believed to be allowable for at least the reason that this claim depends from allowable independent claim 26. *In re Fine, Minnesota Mining and Mfg.Co. v. Chemque, Inc.*, 303 F.3d 1294, 1299 (Fed. Cir. 2002).

K. Claim 31 is Allowable Over *Hatata* in view of *Buer*

The Office Action indicates that claim 31 stands rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Number 4,481,629 ("*Hatata*") in view of U.S. Patent Number 6,188,257 ("*Buer*"). Applicants respectfully traverse this rejection for at least the reason that *Hatata* in view of *Buer* fails to disclose, teach, or suggest all of the elements of claim 31. More specifically, dependent claim 31 is believed to be allowable for at least the reason that this claim depends from allowable independent claim 26. *In re Fine, Minnesota Mining and Mfg.Co. v. Chemque, Inc.*, 303 F.3d 1294, 1299 (Fed. Cir. 2002).

CONCLUSION

In light of the foregoing amendments and for at least the reasons set forth above, Applicants respectfully submit that all objections and/or rejections have been traversed, rendered moot, and/or accommodated, and that the now pending claims are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested.

Any other statements in the Office Action that are not explicitly addressed herein are not intended to be admitted. In addition, any and all findings of inherency are traversed as not having been shown to be necessarily present. Furthermore, any and all findings of well-known art and Official Notice, or statements interpreted similarly, should not be considered well-known for the particular and specific reasons that the claimed combinations are too complex to support such conclusions and because the Office Action does not include specific findings predicated on sound technical and scientific reasoning to support such conclusions.

If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

Respectfully submitted,

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Anthony F. Bonner Jr. Reg. No. 55,012

**THOMAS, KAYDEN,
HORSTEMEYER & RISLEY, L.L.P.**
Suite 1500
600 Galleria Parkway S.E.
Atlanta, Georgia 30339
(770) 933-9500